

REMARKS

The present application includes pending claim 1-33, of which claims 1, 8, 17, 21, 26 and 30 have been amended as set forth above. New claims 34-36 have been added. It is respectfully submitted that the pending claims define allowable subject matter.

Claims 1-9, 12, 13, 17, and 30-32 remain rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent No. 5,303,148 (Mattson). Claims 21, 22, and 26 remain rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent No. 6,273,858 (Fox). Claims 10, 11, 15, 16, and 18-20 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Mattson in view of United States Patent No. 5,335,313 (Douglas). Claims 14 and 33 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Mattson in view of Fox. Claims 23-25, and 27-29 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Fox in view of Douglas. The Applicant respectfully traverses these rejections for the reasons set forth hereafter.

I. Mattson Does Not Anticipate Claims 1-9, 12, 13, 17 and 30-32

The Applicant first turns to the rejection of claims 1-9, 12, 13, 17, and 30-32 under 35 U.S.C. 102(b) as being anticipated by Mattson. The Office Action responds to the previous Amendment by stating the following:

...Mattson discloses a system and method comprising of a volume imaging apparatus for performing diagnostic procedures wherein the user inputs voice command using a microphone (10) to **display the images**.

See September 21, 2004 Office Action at page 2 (emphasis added). Mattson, however, does not use voice commands to control movement or positioning of the imaging device, as discussed below.

Mattson “finds particular application in conjunction with the display and processing of non-invasive image data, such as MRI, CT, and analogous images....” *See* Mattson at column 1, lines 14-18. Mattson relates to a system for viewing diagnostic images.

The volume imaging apparatus responds to preselected electronic commands to display any selected slice through the volume, with or without some of the data removed, and the like. **A speech processor synthesizes a user’s speech pattern and derives corresponding text.** A command interpreter receives the text and determines corresponding commands to feed a system manager which controls the volume imager accordingly. That is, the command interpreter translates the text or command words as processed by the speech processor into the electronic controls signals that heretofore have been produced by an operator keyboard or the like. **The data from the volume imager selected by the commands is transferred to a video device, such as a video recorder or video display terminal or both. In response to the verbal commands, one or more images is called up from the volume imager for display and one or more of the displayed images is recorded. In accordance with a more limited aspect of the present invention, the speech processor further processes vocalizations of the speaker into descriptive text, which text is displayable on the video display or recordable by the video recorder.**

Id. at column 2, lines 15-38 (emphasis added). Mattson discloses a system in which images are called up from the volume image for display and/or vocalizations of the speaker are processed into descriptive text on a video display.

In particular, Mattson discloses a system that “simplifies the **use of diagnostic images by radiologists, surgeons, and others.**” *See id.* at column 2, lines 54-55 (emphasis

added). Further, Mattson discloses a system that “provides for complete hands free control of video displays and for recording video and speed supplied information.” *See id.* at column 2, lines 59-62 (emphasis added). *See also id.* at column 3, lines 31-33 (“Although the display on the monitor B may be controlled by a manual console C, a voice actuated control D is also provided.”).

Mattson, however, does not teach, nor suggest, **controlling movement** of a medical device through voice commands. Instead, Mattson discloses a system of calling up image data previously obtained by a medical device through the use of voice commands. In other words, Mattson uses voice commands to view image data obtained from the medical device *after* the medical devices has been directed, operated, or controlled by a user. That is, Mattson does not teach, nor suggest, “directing a medical device to perform a function ([including movement of the medical device) based on a voice command,” as recited, for example, in claim 1, as amended. In general, Mattson does not teach, nor suggest, voice control of a function of a medical device, “wherein the function includes movement of the medical device,” as recited in claims 1, 8, 17 and 30 of the present application. The Applicant respectfully submits that Mattson does not anticipate claims 1-9, 12, 13, 17, and 30-32, and, therefore, these claims should be in condition for allowance.

II. Fox Does Not Anticipate Claims 21, 22 and 26

The Applicant now turns to the rejection of claims 21, 22, and 26 under 35 U.S.C. 102(b) as being anticipated by Fox. The Office Action responds to the previous Amendment as follows:

Fox’s system and method allows a physician administering the interventional procedure to provide voice commands to the treatment planner in order to control operation of the

treatment planner which suggests that the voice recognition unit identifies a function associated with the interventional procedure.

See September 21, 2004 Office Action at page 2. The Applicant respectfully submits that Fox does not teach, nor suggest, an interventional fluoroscopic imaging system or method in which voice commands control “movement of the said interventional fluoroscopic imaging device.” That is, Fox does not teach, nor suggest, a system or method in which a voice command identifies a function, “wherein the function includes movement of the said interventional fluoroscopic imaging device,” as recited in claims 21, 22 and 26, as discussed below.

Fox “relates generally to systems and methods devices for providing radiation therapy and, more particularly, to systems and method for providing radiation therapy for the prevention of restenosis.” *See* Fox at column 1, lines 12-16. Fox discloses a “radiation planning and verification system” that includes a “treatment planner 20 and an imaging system 12.” *See id.* at column 7, lines 19-23. That is, the treatment planner is separate and distinct from the imaging system. Further, the “treatment planner 20 acquires the images from the IVUS system 12 and combines the transverse images to generate a three-dimensional image of the treatment volume.” *See id.* at column 7, lines 59-61.

The treatment planner, but not the imaging system, includes a controller that may receive voice commands.

The treatment planner 20 further includes a controller 54 **for controlling the operation of the various elements within the treatment planner 20.** The controller 54, for instance, receives commands or data supplied through the voice recognition unit 36 or through other devices, such as the

keyboard 42 or mouse 44. The controller 54 also controls operation of the printer 50, video recorder 38, and monitor 40.

Id. at column 9, lines 13-21 (emphasis added). As shown above, the voice recognition unit is only used with the treatment planner, but not the imaging system. In particular, the controller controls operation of “the various elements within the treatment planner.”

The voice recognition unit 34 of the treatment planner 20 allows the physician administering the treatment, who is dressed in sterile lab garb, to provide verbal commands to the treatment planner 20 **in order to control operations of the treatment planner 20**. The treatment planner 20 allows the patient 158 to remain at one location while the dose is calculated and while the optimal treatment plan is derived.

Id. at column 11, lines 22-28 (emphasis added). Thus, Fox discloses a system that may use voice commands to control the treatment planner. However, Fox does not teach, nor suggest, controlling movement of an imaging system through voice commands.

Fox does not teach, nor suggest, a system for operating an interventional fluoroscopic imaging apparatus through voice commands, or a processing unit for directing said interventional fluoroscopic imaging apparatus to perform a function, including movement of the apparatus, designated by a signal code representing a function identified by the voice command, as recited, for example, in claim 21 of the present application. The Applicants respectfully submit that Fox does not anticipate claims 21, 22 and 26, at least for these reasons. Thus, claims 21, 22 and 26 should be in condition for allowance.

III. Claims 10, 11, 14 15, 16, 18-20, 23-25, 27-29 And 33 Should Also Be In Condition For Allowance

The Applicant now turns to the rejection of claims 10, 11, 15, 16, and 18-20 under 35 U.S.C. 103(a) as being unpatentable over Mattson in view of Douglas. The Applicant

respectfully submits that the combination of Mattson and Douglas does not render claims 10, 11, 15, 16, and 18-20 obvious at least for the reasons discussed above with respect to claims 1-9, 12, 13, 17, and 30-32.

The Applicant now turns to the rejection of claim 14 and 33 under 35 U.S.C. 103(a) as being unpatentable over Mattson in view of Fox. The Applicant respectfully submits that the combination of Mattson and Fox does not render claims 14 and 33 obvious at least for the reasons discussed above.

The Applicant now turns to the rejection of claims 23-25 and 27-29 under 35 U.S.C. 103(a) as being unpatentable over Fox in view of Douglas. The Applicant respectfully submits that the combination of Fox and Douglas does not render claims 23-25 and 27-29 obvious at least for the reasons discussed above.

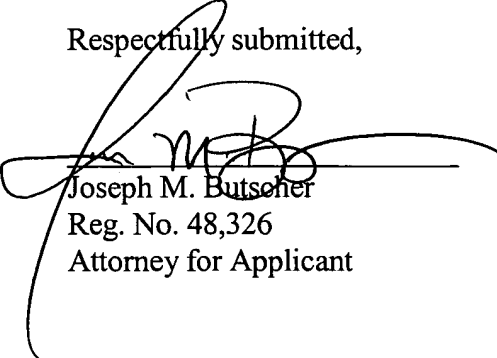
IV. Conclusion

In light of the above, the Applicant requests reconsideration of the rejections of the pending claims and look forward to working with the Examiner to resolve any remaining issues in the application. If the Examiner has any questions or the Applicant can be of any assistance, the Examiner is invited to contact the Applicant. The Commissioner is authorized to charge the fees for the new claims (3 dependent claims X \$18 = \$54) and any other necessary fees or credit any overpayment to Deposit Account 07-0845.

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Date: September 28, 2004

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